

Date: Monday, 10/30/2006 7:40:16 AM  
User: Kim Johnston

## Process Sheet.

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: TUBE ASSEMBLY
Job Number	: 29196		
Estimate Number	: 10426		
P.O. Number	: <i>N/A</i>	Part Number	: D3304044
This Issue	: 10/30/2006 S.O. No. : <i>N/A</i>	Drawing Number	: D3304 REV. B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: <i>N/A</i> Type : MACHINED PARTS	Drawing Revision	: B
Previous Run	: 26669	Material	: <i>N/A</i>
Written By	: <i>[Signature]</i>	Due Date	: 11/6/2006
Checked & Approved By	: <i>[Signature]</i> 06 10 30	Qty:	6 Um: Each
Comment	: Est: D 04.11.26 Revised Steps 7 KJ/JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M304TR0875W065	SS TUBING
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Comment: Qty.: 1.9469 f(s)/Unit Total : 1.9469 f(s)

Material: AISI 304/316 SS tubing 0.875" x 0.065" wall  
(M304TR0.875W.065)

Batch: *16758**J.G 06/11/02 6*

2.0	HARDINGE	HARDINGE CNC LATHE SMALL
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Comment: HARDINGE CNC LATHE SMALL

1- Cut blank: 22.00" as per Dwg D3304  
2- Turn as per Folio FA458 and Dwg D3304  
3- Deburr

*J.G 06/11/02 6*

3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
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Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*J.G 06/11/02 6*

4.0	QC8	SECOND CHECK
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Comment: SECOND CHECK

*[Signature] 06/11/02 6*

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
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Comment: SMALL &amp; MEDIUM FAB RESOURCE 1

1- Drill as per Dwg D3304 using drill Jig D3304-T1  
2- Form as per Dwg D3304  
3- Cut tube to length as per Dwg D3304  
4- Deburr

*SAD 06/12/02 6*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 10/30/2006 7:40:16 AM  
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## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 29196

Part Number: D3304044

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

11/02/12/18 (6)

7.0

D33048

Bracket



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Bracket

Pick:

Qty	Part Number	Description	Batch
1	D3304-8	Bracket	B25157

PD 07-01-03 (6)

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld bracket as per Dwg D3304 and QSI 004

PD 07-01-03 (6)

9.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

11/07/04/03 (6)

10.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

FL/a.m 07/01/04 (6)

11.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

11/02/01/04 (6)

12.0

BLBS0016

PIP PIN



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

PIP PIN

Pick:

Qty	Part Number	Description	Batch
1	BLBS-0016	Pip Pin	M100726

FF 07-01-04 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 10/30/2006 7:40:16 AM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TUBE ASSEMBLY

Job Number: 29196

Part Number: D3304044

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

CBL460

Loop Sleeve



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Loop Sleeve

Pick:

Qty	Part Number	Description	Batch
2	CBL-460	Loop Sleeve	M 100644

FF 07-01-04

14.0

CBL1240

Cable



Comment: Qty.: 1.0416 f(s)/Unit Total : 1.0416 f(s)

Cable

Pick:

Qty	Part Number	Description	Batch
12.5"	CBL-1240	Cable	M 102439

FF 07-01-04

15.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



Comment: SMALL & MEDIUM FAB RESOURCE 1

Assemble lanyard and pip pin as per Dwg D3304

Identify as D3304-044

FF 07-01-04

16.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

M 07/01/04 (C)

17.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify with P/N and B/N as per Dwg using a permanent fine point marker, then Stock

Location: \_\_\_\_\_

M 7/1/04 (C)

18.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

M 07/01/08 (C)

Job Completion



M 07.01.08

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: ☒ Date: 27/01/08  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
07-01-04	15	2x CBL-1240 cable 1x CBL-460 Loop sleeve wire split.	AS1042	Destroyed & Replaced Destroyed & Replaced	07-01-04 RF	070104	AS1042	070104

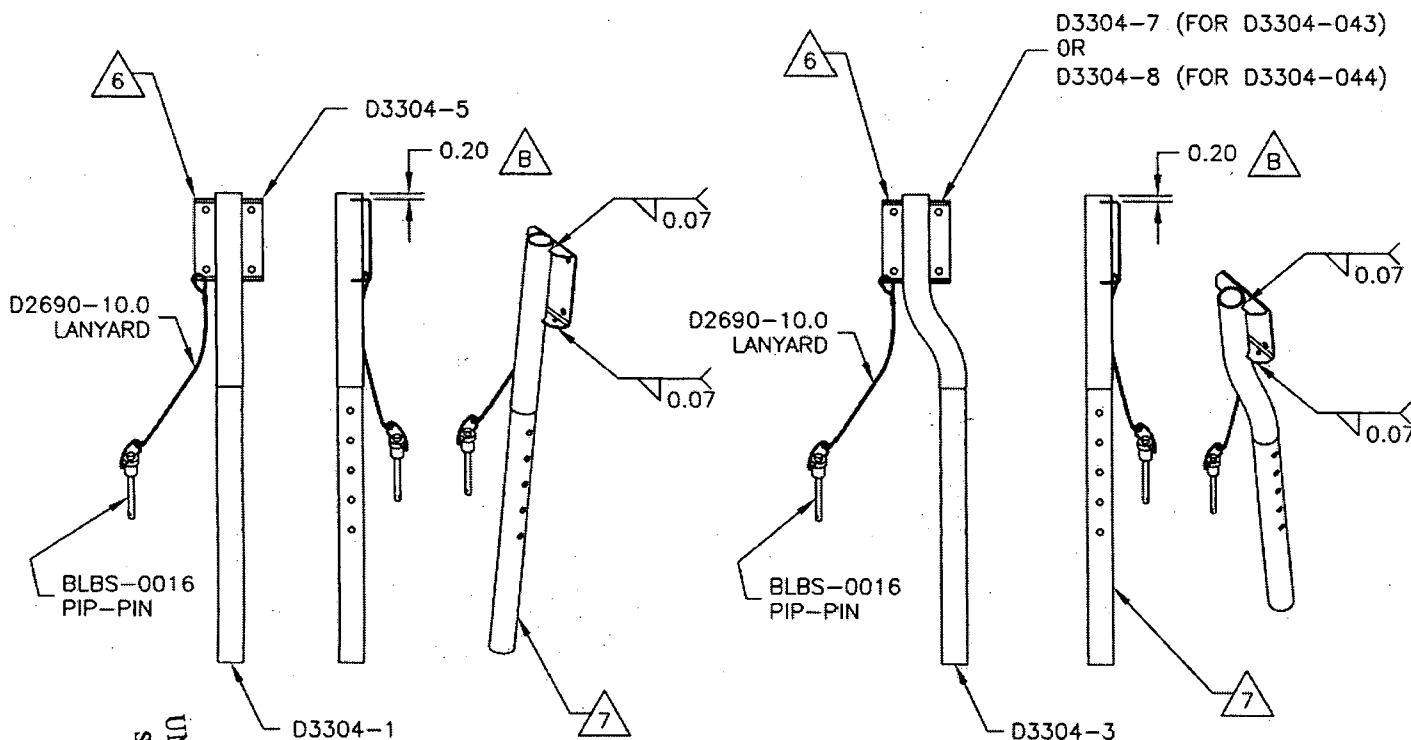
NOTE: Date & initial all entries



**DART**

DESIGN	RF	DRAWN BY	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. B
CHECKED	<i>[Signature]</i>	APPROVED	<i>[Signature]</i>	DRAWING NO. D3304	SHEET 1 OF 4
DATE	05.07.15			TITLE TUBE ASSEMBLY	SCALE 1:6
A	04.08.18			NEW ISSUE	
B	05.07.15			UPDATE DIMENSIONS: ADD D3304-7/-8	

RELEASED  
05.08.11



**D3304-041 TUBE ASSEMBLY**

**D3304-044 TUBE ASSEMBLY (SHOWN)  
D3304-043 OPPOSITE**

**D3304-041/-043/-044 NOTES:**

- 1) FINISH: POWDER COAT GREY SANDEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 2) WELD PER DART QSI 004
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) IDENTIFY AS INDICATED USING FINE POINT PERMANENT INK MARKER "TCCA-PDA, DART AEROSPACE LTD, P/N D3304-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"
- 7) IF BEING ASSEMBLED WITH D3303-041, ADD THE FOLLOWING USING A FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D412-724-XXX B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA04-11"

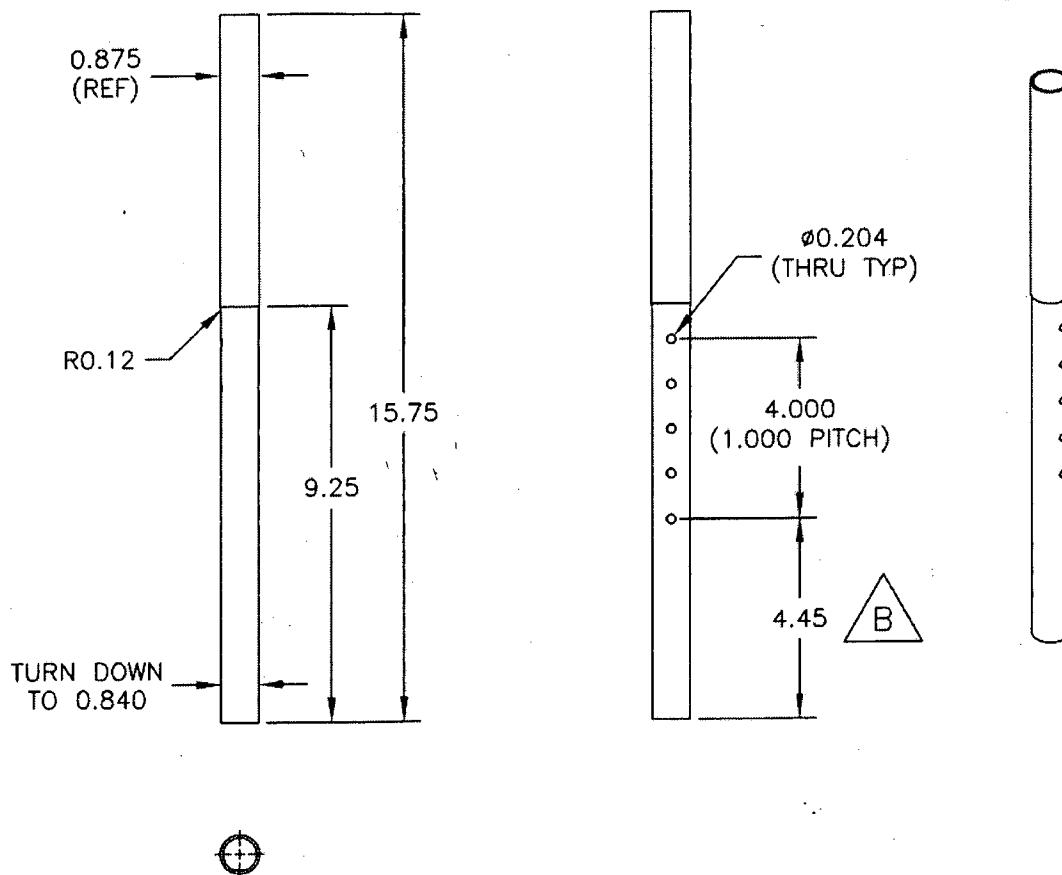
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CHECKED H	APPROVED H	DRAWING NO. D3304	REV. B SHEET 2 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4

RELEASED  
05.08.11 H



### D3304-1 TUBE

#### D3304-1 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE  $\phi 0.875 \times 0.065$  WALL  
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

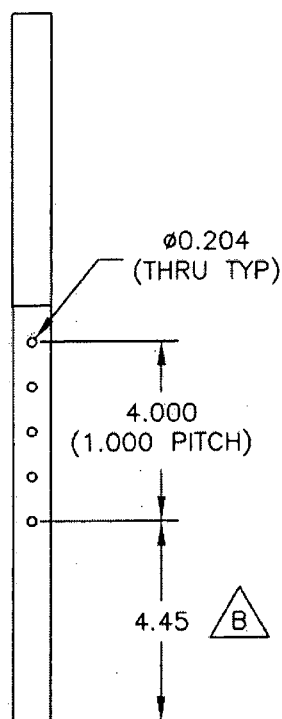
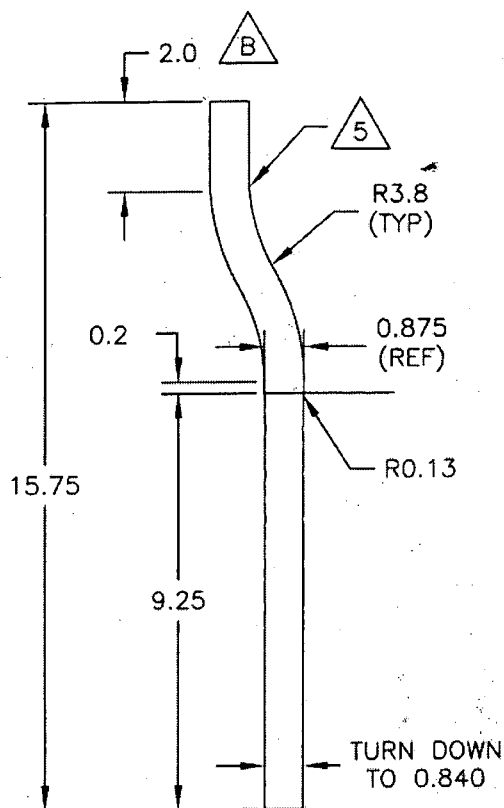
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NO. 29196

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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3304	REV. B SHEET 3 OF 4
DATE 05.07.15		TITLE TUBE ASSEMBLY	SCALE 1:4



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05-08-11 *[Signature]*

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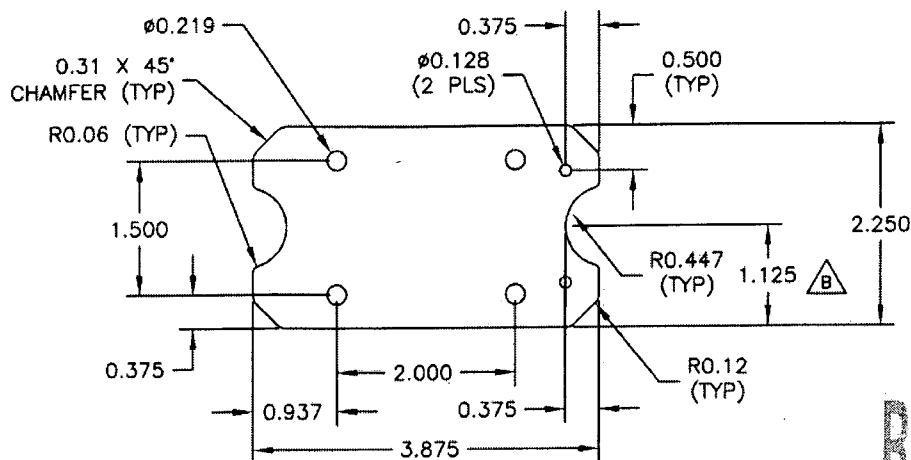
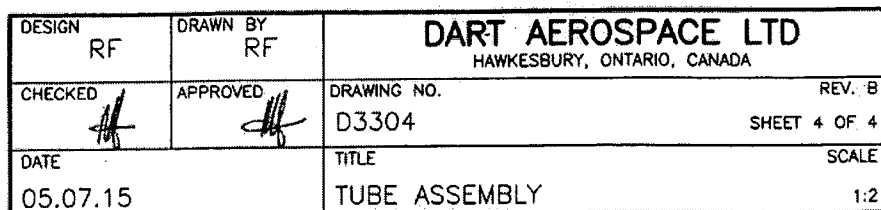
### D3304-3 TUBE

#### D3304-3 NOTES:

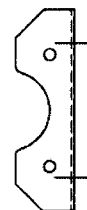
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL TUBE  $\phi 0.875 \times 0.065$  WALL  
(REF. DART SPEC M304TR0.875W.065) ENSURE SEAMLESS TUBE IS USED
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) BEND LINES 9.625, 13.375 DIMENSIONS

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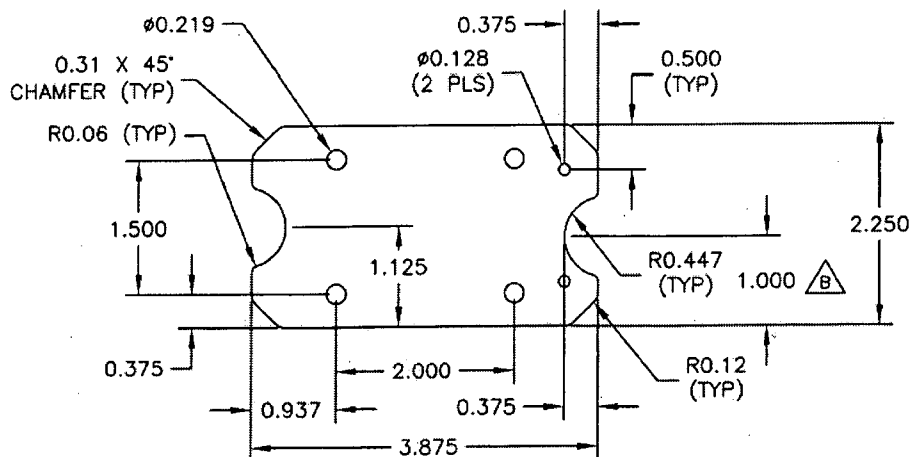
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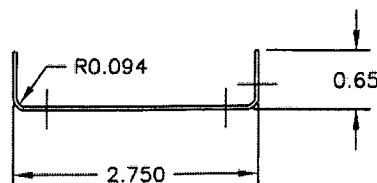
**D3304-5 FLAT PATTERN**



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05-09-11



**D3304-7/-8 FLAT PATTERN**



D3304-5/-7 BRACKET  
D3304-8 OPPOSITE

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WORK ORDER  
NO. 29196

NOTES:

- NOTES:
- 1) MATERIAL: AISI 304/316 SS 0.040 THICK SHEET (REF. DART SPEC M304S20GA)
  - 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 3) ALL DIMENSIONS ARE IN INCHES
  - 4) BREAK ALL SHARP EDGES 0.005 TO 0.015

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